[JOINT COMMITTEE PRINT]

PRESENT LAW, PROPOSALS, AND ISSUES RELATING TO INDIVIDUAL RETIREMENT ARRANGEMENTS AND OTHER SAVINGS INCENTIVES

SCHEDULED FOR A HEARING

BEFORE THE

SENATE COMMITTEE ON FINANCE

ON MARCH 27, 1990

PREPARED BY THE STAFF

OF THE

JOINT COMMITTEE ON TAXATION

MARCH 26, 1990

J86247
S362-8

U.S. GOVERNMENT PRINTING OFFICE

27-936 WASHINGTON : 1990 JCS-11-90

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, DC 20402

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101ST CONGRESS, 2D SESSION

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INTRODUCTION

The Senate Committee on Finance has scheduled a hearing on March 27, 1990, on legislative proposals and issues relating to individual retirement arrangements (IRAs) and other savings incentives.

This pamphlet,[1] prepared by the Staff of the Joint Committee on Taxation, provides a brief description of the present-law rules regarding IRAs and other savings incentives (Part I), legislative background of the present-law rules (Part II), a description of proposals including the Senate Finance Committee proposal (S. 1750), the Administration proposal (S. 2071, Senators Packwood, Roth, and Dole), S. 1771 (Senators Packwood, Roth, and others), and S. 1069 (Senator Baucus) (Part III), and a discussion of the issues relating to IRAs and other savings incentives (Part IV).

[1] This pamphlet may be cited as follows: Joint Committee on Taxation, *Present Law, Proposals, and Issues Relating to Individual Retirement Arrangements and Other Savings Incentives* (JCS–11–90), March 26, 1990.

I. PRESENT LAW

A. Individual Retirement Arrangements

In general

Under certain circumstances, an individual is allowed a deduction for contributions (within limits) to an individual retirement account or an individual retirement annuity (an IRA) (Code sec. 219). An individual is generally not taxed on amounts held in an IRA, including earnings on contributions, until the amounts are withdrawn from the IRA. Thus, under present law, tax deferral is provided during the period from the time an IRA contribution is made until an amount is withdrawn from the IRA. Contributions cannot be made to an IRA after the individual attains age 70½.

Deduction limits

Under present law, the maximum deductible contribution that can be made to an IRA is generally the lesser of $2,000 or 100 percent of an individual's compensation (earned income in the case of self-employed individuals). A single taxpayer is permitted to make the maximum deductible IRA contribution for a year if the individual is not an active participant in an employer-sponsored retirement plan for the year or the individual has adjusted gross income (AGI) of less than $25,000. A married taxpayer filing a joint return is permitted to make the maximum deductible IRA contribution for a year if neither spouse is an active participant in an employer-sponsored plan or the couple has combined AGI of less than $40,000.

If a single taxpayer or either spouse (in the case of a married taxpayer) is an active participant in an employer-sponsored retirement plan, the IRA maximum deduction is phased out over certain AGI levels. For single taxpayers, the maximum IRA deduction is phased out between $25,000 and $35,000 of AGI. For married taxpayers, the maximum deduction is phased out between $40,000 and $50,000 of AGI.

In the case of a married taxpayer filing a separate return, the deduction is phased out between $0 and $10,000 of AGI. A couple is not considered married for purposes of the IRA deduction rules if they file separate returns and live apart from one another at all times during the taxable year.

An individual is an active participant in an employer-sponsored retirement plan for the taxable year if the individual is an active participant for the plan year ending with or within the individual's taxable year. An employer-sponsored retirement plan means (1) a qualified pension, profit-sharing, or stock bonus plan (sec. 401(a)); (2) a qualified annuity plan (sec. 403(a)); (3) a simplified employee pension plan (sec. 408(k)); (4) a plan established for its employees by

the U.S., by a State or political subdivision, or by any agency or instrumentality of the U.S., or a State or political subdivision (other than an unfunded deferred compensation plan of a State or local government (sec. 457)); (5) a plan described in section 501(c)(18); and (6) a tax-sheltered annuity (sec. 403(b)).

Nondeductible IRA contributions

Individuals may make nondeductible IRA contributions to the extent deductible contributions are not allowed because of the AGI phaseout and active participant rules. Thus, an individual may make nondeductible contributions up to the excess of (1) the lesser of $2,000 or 100 percent of compensation over (2) the IRA deduction limit with respect to the individual. In addition, an individual may elect to make nondeductible contributions in lieu of deductible contributions. Individuals making nondeductible contributions are required to report the amount of such contributions on their tax return. As is the case with earnings on deductible IRA contributions, earnings on nondeductible contributions accumulate on a tax-deferred basis.

Taxation of withdrawals

Amounts withdrawn from IRAs (other than nondeductible contributions) are includible in income when withdrawn. If an individual withdraws an amount from an IRA during a taxable year and the individual has previously made both deductible and nondeductible IRA contributions, then the amount includible in income for the taxable year is the portion of the amount withdrawn that bears the same ratio to the amount withdrawn as the income on all IRAs of the individual bears to the value of all such IRAs.

To discourage the use of amounts contributed to an IRA for nonretirement purposes, withdrawals from an IRA prior to age 59½, death, or disability are generally subject to an additional 10-percent income tax (sec. 72(t)). The 10-percent additional income tax is intended to recapture the tax benefit of deferral. The 10-percent additional income tax does not apply to withdrawals that are part of a series of substantially equal periodic payments made for the life (or life expectancy) of the taxpayer or the joint lives (or joint life expectancies) of the taxpayer and the taxpayer's beneficiaries.

B. Other Savings Incentives

Educational savings bonds

Under present law, interest income earned on a qualified U.S. Series EE savings bond issued after December 31, 1989, is excludable from gross income if the proceeds of the bond upon redemption do not exceed qualified higher education expenses paid by the taxpayer during the taxable year (sec. 135).

The exclusion from gross income of interest on U.S. Series EE savings bonds is available only to taxpayers who are issued such bonds after having attained age 24. During the year the bond is redeemed, the taxpayer to whom such bond was issued must pay "qualified higher education expenses," meaning tuition and required fees for the enrollment or attendance of the taxpayer, the taxpayer's spouse, or a dependent of the taxpayer at an eligible

educational institution. A taxpayer cannot qualify for the interest exclusion by paying for the education expenses of another person (such as a grandchild or other relative) who is not a dependent of the taxpayer.

The exclusion is phased out for certain upper-income taxpayers. A taxpayer's AGI for the year the bond is redeemed (not the year the bond was issued) determines whether or not the phaseout applies. For taxpayers filing a joint return, the phaseout range is for AGI between $60,000 and $90,000. For single taxpayers and heads of households, the phaseout range is for AGI between $40,000 and $55,000. The phaseout rate for the exclusion is applied ratably over the income phaseout range.

Generally, all Series EE savings bonds can be purchased through payroll savings plans, at most commercial banks, at many savings and loan associations, and at other qualified financial institutions. Such bonds can be purchased in various denominations, ranging from $50 to $10,000. The purchase price is one-half the denomination (or face value) of the bond. In any one year, a person may purchase Series EE savings bonds with denominations (or face value) totalling up to $30,000. The interest rate on Series EE savings bonds varies, depending on how long the bonds are held. The interest rate on such bonds held for more than 5 years is based on the market rate for Treasury outstanding obligations with 5 years to maturity. Bonds held for less than 5 years earn interest on a fixed, graduated scale. Interest earned on Series EE savings bonds is paid when the bonds are redeemed [2]

Other provisions

A number of other types of tax-favored savings arrangements are permitted under present law, a discussion of which is beyond the scope of this pamphlet. These arrangements include employer-sponsored retirement plans, retirement plans for self-employed individuals, life insurance contracts, and tax-exempt bonds.

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[2] See Congressional Research Service, *Saving for College with Education Savings Bonds*, March 22, 1989, pp. 3–6.

II. LEGISLATIVE BACKGROUND

A. Individual Retirement Arrangements

Employee Retirement Income Security Act of 1974

The individual retirement savings provisions of the Internal Revenue Code were originally enacted in the Employee Retirement Income Security Act of 1974 (ERISA) to provide a tax-favored retirement savings arrangement to individuals who were not covered under a tax-qualified retirement plan maintained by an employer. Individuals who were active participants in employer-sponsored retirement plans were not permitted to make deductible contributions to an IRA. As enacted in ERISA, the limit on the deduction for IRA contributions was generally the lesser of (1) 15 percent of the individual's compensation (earned income in the case of a self-employed individual) for the year, or (2) $1,500.

Economic Recovery Tax Act of 1981

The Economic Recovery Tax Act of 1981 (ERTA) increased the deduction limit for contributions to IRAs and removed the restrictions on IRA contributions by active participants in employer-sponsored plans. Under ERTA, the deduction limit for IRAs was generally the lesser of (1) $2,000, or (2) 100 percent of the individual's compensation (earned income in the case of a self-employed individual). Any individual was entitled to make a deductible contribution to an IRA even if the individual was an active participant in an employer's plan.

The ERTA changes were motivated by Congressional concern that a large number of workers, including many who were covered by employer-sponsored retirement plans, faced the prospect of retirement without the resources needed to provide adequate retirement income levels. The Congress concluded that retirement savings by individuals during their working years can make an important contribution towards providing retirement income security.

Tax Reform Act of 1986

The Tax Reform Act of 1986 (the 1986 Act), added the present-law restrictions on deductible IRA contributions by active participants in employer-sponsored retirement plans. These restrictions are similar to those originally included in ERISA. In addition, the 1986 Act added the present-law rules permitting individuals to make nondeductible contributions to an IRA.

B. Other Savings Incentives

The exclusion from income for interest on education savings bonds was added to the Internal Revenue Code by the Technical and Miscellaneous Revenue Act of 1988.

III. DESCRIPTION OF PROPOSALS

A. S. 1750 (Senate Finance Committee) [3]

In general

The deductibility of an individual's contributions to an IRA would be expanded under the bill. Generally, the bill would permit a deduction of one-half of the otherwise nondeductible portion of the contribution made by an individual. The bill also would allow withdrawals from an IRA without imposition of the 10-percent additional income tax to the extent the amount withdrawn is used for either the purchase of a first home or for certain education expenses.

Expansion of present-law deduction rules

Under the bill, an individual who contributes to an IRA would be able to deduct the amount of the contribution that is deductible under present law, plus 50 percent of the contribution that is not deductible. This additional 50-percent deduction would be allowed only with respect to contributions that would otherwise have been deductible but for the active participant rule. The present-law maximum dollar limitation ($2,000) and other limitations relating to deductibility (e.g., the 100 percent of compensation limit) would continue to apply.

For example, assume that a single taxpayer who is an active participant has an AGI of $100,000. The taxpayer contributes $2,000 to an IRA. Under present law, none of the $2,000 contribution is deductible because of the taxpayer's AGI level and active participation in an employer-sponsored retirement plan. Under the bill, the taxpayer would be permitted to deduct $1,000 (50 percent of the nondeductible contribution).

The bill also would disallow the deduction for interest on loans the proceeds of which are used to make an IRA contribution.

Withdrawals by first-time homebuyers

Under the bill, the 10-percent additional income tax on certain IRA withdrawals would be waived for withdrawals by first-time homebuyers that are used within 60 days to acquire, construct, or reconstruct the taxpayer's principal residence. A first-time homebuyer would be an individual who has not had an ownership interest in a principal residence during the 2-year period ending on the date of acquisition of the principal residence to which the with-

[3] The provisions described were included in the 1989 budget reconciliation provisions, as approved by the Senate Finance Committee (included in S. 1750 as reported by the Senate Budget Committee), but were deleted by Senate floor amendment. The provisions are similar to those contained in S. 1682, the Savings and Investment Incentive Act of 1989, introduced by Senator Bentsen and others on September 27, 1989.

drawal relates. The date of acquisition would be the date the individual enters into a contract to purchase a principal residence or begins construction or reconstruction of such a residence. The bill would require that the spouse of the taxpayer also meet this requirement as of the date the contract is entered into or construction commences. Principal residence would be defined as under the provisions relating to the rollover of gain on the sale of a principal residence (sec. 1034).

Under the bill, any amount withdrawn from an IRA for the purchase of a principal residence would be required to be used within 60 days of the date of withdrawal. The 10-percent additional income tax on early withdrawals would be imposed with respect to any amount not so used. However, if the 60-day rule could not be satisfied due to a delay in the acquisition of the residence, the taxpayer would be able to recontribute all or part of the amount withdrawn to the IRA prior to the end of the 60-day period without adverse tax consequences. Any amount recontributed would generally be treated as a rollover contribution (sec. 408(d)) without regard to the limitations on the frequency of IRA to IRA rollovers.

Withdrawals for education expenses

Under the bill, withdrawals used by a taxpayer during the year for qualified higher education expenses would not be subject to the 10-percent additional income tax on early withdrawals. Qualified higher education expenses would be defined as tuition, fees, books, supplies, and equipment required for courses at an eligible educational institution, as defined under the provisions relating to education savings bonds (sec. 135). Amounts withdrawn would be available for use for the education of the taxpayer, or the taxpayer's spouse, dependents, or grandchildren.

The amount that could be withdrawn for education expenses for a taxable year without imposition of the 10-percent additional tax would be reduced by any amount that is excludable from the taxable income of the taxpayer under the provisions relating to education savings bonds (sec. 135).

Effective date

Under S. 1750, the expansion of the present-law IRA deduction provisions would be effective for taxable years beginning after December 31, 1990. The provisions relating to the exceptions to the 10-percent additional income tax would apply to distributions on or after January 1, 1990. The deduction disallowance for certain interest expenses would be effective for indebtedness incurred after the date of enactment in years ending after such date.

B. Administration Proposal (S. 2071, Senators Packwood, Roth, and Dole) [4]

Family savings accounts

Under the Administration proposal and S. 2071, an individual would be permitted to make nondeductible contributions to a family savings account (FSA). If these contributions remain in the account for 7 years or more, amounts withdrawn (including both the contributions and earnings thereon) would be excluded from gross income. The bill would also allow certain withdrawals from an IRA without imposition of the 10-percent additional income tax to the extent the amount withdrawn is used for the purchase of a first home.

Contribution limits

The maximum annual contribution to an FSA under the proposal would be limited to the lesser of $2,500 or 100 percent of the individual's compensation (a married couple would be permitted to make $5,000 in annual contributions if both spouses together earn at least $2,500). Individuals who may be claimed as a dependent on another taxpayer's return could not contribute to an FSA.

Only individuals meeting certain AGI limitations would be able to make a contribution to an FSA. Contributions would be permitted for single taxpayers with AGI of less than $60,000, for heads of households with AGI of less than $100,000, and for married taxpayers filing joint returns with AGI of less than $120,000. Amounts contributed to an FSA would not affect the amount that could otherwise be contributed to tax-favored retirement plans (e.g., employer-sponsored retirement plans or IRAs) or to other tax-favored forms of saving (e.g., education savings bonds).

Taxation of withdrawals

Special rules would apply with respect to withdrawals of earnings allocable to contributions not held in the account for 7 years. To the extent a withdrawal consists of earnings allocable to contributions held less than 3 years, such earnings would be includible in gross income. The individual also would be subject to an additional 10-percent tax on the amount includible in income. To the extent a withdrawal consists of earnings allocable to amounts held at least 3 years but less than 7 years, such earnings would be includible in gross income, but no additional tax would apply. In no event are withdrawals of contributions includible in gross income.

Withdrawals from an FSA would be treated as made first from the earliest contribution (and earnings thereon) remaining in the account at the time of withdrawal. Earnings would be allocated to contributions in accordance with Treasury regulations.

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[4] S. 2071, the Savings and Economic Growth Act of 1990, was introduced by Senators Packwood, Roth, and Dole on February 6, 1990. The bill contains the proposed Family Savings Account and IRA withdrawal provisions described in the President's Budget Proposal for Fiscal Year 1991.

Withdrawals by first-time homebuyers

The Administration proposal and S. 2071 would allow certain individuals to withdraw up to $10,000 from an IRA for the purchase of a first home without imposition of the present-law 10-percent additional income tax on early withdrawals. This provision would apply to individuals who did not own a home in the last 3 years and who are purchasing or constructing a principal residence that costs no more than 110 percent of the median home price in the area where the residence is located. No withdrawal would generally be permitted from an account that had received a rollover amount from a qualified plan.

Effective date

The Administration proposal and S. 2071 would apply to taxable years beginning after December 31, 1989.

C. S. 1771 (Senators Packwood, Roth, and others) [5]

In general

Under the bill, a taxpayer would be permitted to make nondeductible contributions to an individual retirement plus account (IRA-Plus account). Amounts withdrawn from the IRA-Plus account generally would not be included in taxable income. Special rules would apply with respect to withdrawals for first home purchases, education, and medical expenses.

Nondeductible contributions

Under S. 1771, a taxpayer would be permitted to contribute annually to an IRA-Plus account the lesser of $2,000 or the individual's compensation (earned income in the case of a self-employed individual). Starting in years after 1994, the maximum dollar contribution would increase to $3,000. The maximum permitted contribution would be reduced by any deductible or nondeductible contributions made to a present-law IRA. A nonworking spouse would be able to contribute to an IRA-Plus account provided the combined compensation of both spouses is sufficient. All contributions would be nondeductible and, unlike the present-law IRA rules, could continue to be made after an individual has attained the age of 70½.

Present-law IRAs could be rolled over into an IRA-Plus account prior to the earlier of January 1, 1992, or the date on which the taxpayer attains age 55. IRA contributions previously deducted would be included in income ratably over a 4-year period. Earnings on deductible contributions would not be taxed upon rollover; subsequent withdrawals of rolled over amounts (and earnings thereon) would be taxed as described below.

Taxation of withdrawals

Except in the case of a qualified distribution, amounts withdrawn from an IRA-Plus account would be subject to the general rules regarding taxation of IRA distributions. Thus, a withdrawal

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[5] S. 1771 was introduced by Senators Packwood, Roth, and others on October 19, 1989.

would be includible in income to the extent it constitutes earnings, and would also be subject to the 10-percent additional income tax.

Qualified distributions would not be includible in income and would not be subject to the 10-percent additional tax. A qualified distribution would include (1) a distribution made after an individual attains age 59½, (2) a distribution made due to the death or disability of the taxpayer, or (3) a qualified special purpose distribution. A distribution would not be a qualified distribution (and therefore would be subject to tax in accordance with the general rules) if it is made less than 5 years after the individual established an IRA-Plus account. In the case of a rollover from a present-law IRA, the 5 years would be measured from the date of the rollover.

A qualified special purpose distribution would include a distribution used to purchase a first home or for the payment of certain education or medical expenses. Qualified special purpose distributions would be limited to 25 percent of the IRA-Plus account. The 5-year holding period would also apply to qualified special purpose distributions.

A taxpayer would qualify as a first-time homebuyer if the taxpayer (and his or her spouse, if any), has no present ownership interest in a principal residence during the 3-year period ending on the date of the purchase. Principal residence would be defined as under the provisions relating to the rollover of gain on the sale of a principal residence (sec. 1034). Under the bill, the basis of the house would be reduced by the amount of the withdrawal that was excluded from income by reason of the provision.

In order to qualify as a withdrawal to purchase a first home, the bill would require that amounts withdrawn be used to acquire, construct, or reconstruct the principal residence of the first-time homebuyer. Eligible expenses would also include usual or reasonable costs of settlement, financing, or closing. Amounts withdrawn would generally be required to be applied to the purchase of a home within 60 days of the withdrawal. Amounts not so used could generally be recontributed to an IRA-Plus account without adverse tax consequences.

Withdrawals from the IRA-Plus account would also be permitted in order to pay or reimburse medical expenses to the extent such expenses would be allowable as a deduction as amounts paid for medical care (sec. 213), without regard to whether the taxpayer itemizes deductions.

Finally, withdrawals would be permitted in order to pay for certain qualified higher education expenses including tuition, fees, books, supplies, and equipment required for enrollment or attendance of the taxpayer, or the taxpayer's spouse, dependent children, or grandchildren at an eligible institution. Eligible institutions would include colleges or certain vocational education facilities (as described under the rules relating to education savings bonds). The amount that could be withdrawn for education expenses for a taxable year under the provision would be reduced by any amount that is excludable from the taxable income of the taxpayer under the provisions relating to education savings bonds (sec. 135).

Effective date

The bill would apply to taxable years beginning after December 31, 1989.

D. S. 1069 (Senator Baucus) [6]

Increase in nondeductible contributions; IRA withdrawals

The bill would increase the maximum nondeductible IRA contribution to $4,000. The present-law 100-percent compensation limit would still apply. In addition, the bill would add exceptions to the present-law 10-percent additional tax on early withdrawals from an IRA for certain education expenses, first-time home purchases, and long-term care expenses.

Education expenses eligible for the exception would be qualified tuition and related expenses of the taxpayer or the taxpayer's spouse and dependents. Qualified tuition and related expenses would include tuition and fees required for enrollment at an educational institution, books, supplies, and equipment required for courses of instruction, and reasonable living expenses incurred while away from home. Expenses of retraining for purposes of obtaining or enhancing future employment would also be eligible for the exception.

The exception for first-time homebuyers would apply to amounts used to acquire or construct a principal residence (within the meaning of sec. 1034), if the taxpayer did not have a present ownership interest in a principal residence at any time prior to the acquisition or construction of the home.

An exception from the early withdrawal tax would also be available with respect to amounts withdrawn by the taxpayer for custodial or health care provided to the taxpayer or his or her spouse. The exception would apply to care provided in a nursing home or to any goods or services provided outside the nursing home in connection with the provision of the custodial or health care to the individual.

Effective date

S. 1069 would be effective for taxable years beginning after December 31, 1989.

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[6] S. 1069 was introduced by Senator Baucus on May 18, 1989.

IV. ISSUES RELATING TO INDIVIDUAL RETIREMENT ACCOUNTS AND OTHER SAVINGS INCENTIVES

A. The Role of Saving in the National Economy

Saving, investment, and economic growth

Investment fosters economic growth by increasing the total amount of capital available for production. From a consumption perspective, a larger pool of capital enables greater production of goods and services for consumers. From an income perspective, a larger pool of capital enables workers to be more productive. Increases in productivity generally lead to growth in wages and salaries (i.e., higher earnings and more employment).

It is important to distinguish gross investment from net investment. Gross investment includes investment which is undertaken to replace depreciated or worn out capital. Net investment measures increases to the capital stock. Even if there is no growth in net investment, investment to replace depreciated capital still enhances economic growth to the extent that the replacement capital embodies improved (and more efficient) equipment and technologies.

In simple terms, national saving provides the source of funds for national investment. A basic accounting identity of the national income and product accounts [7] provides that national investment must equal the sum of private saving, public saving, net imports (total imports less total exports), and net transfer payments to foreigners (e.g., donations to international relief efforts). Many analysts have ignored the foreign sector, primarily because in the past it was small relative to the U.S. economy, and interpreted this

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[7] The national income and product accounts measure the flow of goods and services (product) and income in the economy. The gross national product (GNP) of the economy is the total annual value of goods and services produced by the economy and may be measured in several ways. One way is to measure GNP by expenditure on final product in the economy. By this measure,

(1) GNP = C + I + G + (X-M).

Equation (1) is an accounting identity which states that gross national product equals the sum of consumption expenditures (C), investment expenditures on plant, equipment, inventory, and residential construction (I), governmental purchases of goods and services (G), and net exports (exports less imports, or X-M).

An alternative is to measure GNP by the manner in which income created in the economy is disposed of. By this measure,

(2) GNP = C + S + T + R.

Equation (2) is another accounting identity which states that gross national product equals the sum of consumption expenditures, saving by consumers and businesses (S), net tax payments to the government (T), (net tax payments are total tax receipts less transfer, interest, and subsidy payments made by all levels of government), and net transfer payments to foreigners by private citizens, such as donations to international relief efforts (R).

Because both measures of GNP are simple accounting identities, the right hand side of equation (1) must equal the right hand side of equation (2). From this observation can be derived an additional national income accounting identity.

(3) I = S + (T-G) - (X-M) + R

This is the basis for the statement in the text that national investment equals private saving (S), plus public saving (T-G), net imports (M-X), and net transfer payments to foreigners (R).

basic relationship as saying that national investment must equal national saving, where national saving is the sum of private saving and public saving.

National saving and foreign trade and investment [8]

National investment need not equal national saving if there is an international balance of payments surplus or deficit. Economists argue that dollars which Americans spend overseas, either through the purchase of imported products or through transfers overseas return to the United States in two ways. First, foreigners could buy American products. That is, the United States could export some of its national output. Second, foreigners could make investments in the United States. This latter event would directly increase national investment. However, a trade deficit need not cause foreign investment in the United States. Some economists argue that when demand for investment funds in the United States outstrips the supply of national saving, interest rates rise in response. Increases in interest rates attract foreign capital to investment in the United States. However, to take advantage of this opportunity, foreign investors first must convert their currencies to dollars. This increases demand for the dollar, thereby increasing the dollar's exchange rate relative to the foreign currency. A stronger dollar makes imported goods relatively cheaper and our exports relatively more expensive. As a consequence, net exports fall and an increased trade deficit could result.

Some observers are concerned that low national saving encourages and may even require foreign investment in the United States. Profits generated by this investment could flow abroad rather than to future generations of Americans. Proponents of foreign direct investment counter that by providing current American workers with physical capital, foreign investment increases the productivity and ultimately the wages of current and future Americans.

Sources of national saving

National saving is generally divided into private saving and public saving. Private saving is comprised of household or personal saving and business saving. Households save by not spending all of their disposable income (i.e., after-tax income). Businesses save by retaining some of their earnings. Public saving reflects the extent to which the Federal, State, and local governments run budget surpluses or deficits. Table 1 presents data on the components of national saving in the United States. As the table demonstrates, business saving typically has been about twice as large as personal saving. In recent years, public dissaving (i.e., government deficits) has been almost as large as (and between 1985 and 1987 larger than) personal saving.

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[8] For a more detailed discussion of foreign trade and domestic saving and investment, see Joint Committee on Taxation, *Background and Issues Relating to the Taxation of Foreign Investment in the United States* (JCS–1–90), January 23, 1990.

Table 1.—Gross Saving, Selected Years, 1929–1989

[Billions of dollars]

Year	Gross private saving			Public saving			Total national saving
	Personal	Business	Total	Federal	State and local	Total	
1929	2.6	12.3	14.9	1.2	−0.2	1.0	15.9
1939	1.8	9.3	11.1	−2.2	0.0	−2.2	8.9
1949	7.4	32.5	39.9	−2.6	−0.7	−3.4	36.5
1954	16.4	42.3	58.8	−6.0	−1.1	−7.1	51.6
1959	21.8	60.3	82.1	−1.1	−0.4	−1.6	80.5
1964	31.5	79.3	110.8	−3.3	1.0	−2.3	108.5
1969	42.2	106.7	148.9	8.4	1.5	9.9	158.8
1974	96.7	157.6	254.3	−11.6	7.2	−4.3	247.9
1975	104.6	198.9	303.6	−69.4	4.5	−64.9	238.7
1976	95.8	225.6	321.4	−53.5	15.2	−38.4	283.0
1977	90.7	263.8	354.5	−46.0	26.9	−19.1	335.4
1978	110.2	298.9	409.0	−29.3	28.9	−0.4	408.6
1979	118.1	327.7	445.8	−16.1	27.6	11.5	458.4
1980	136.9	341.5	478.4	−61.3	26.8	−34.5	445.0
1981	159.4	391.1	550.5	−63.8	34.1	−29.7	522.0
1982	153.9	403.2	557.1	−145.9	35.1	−110.8	446.4
1983	130.6	461.6	592.2	−176.0	47.5	−128.6	463.6
1984	164.1	509.5	673.5	−169.6	64.6	−105.0	568.5
1985	125.4	539.9	665.3	−196.9	65.1	−131.8	533.5
1986	124.9	544.6	669.5	−206.9	62.8	−144.1	525.3
1987	101.8	562.0	663.8	−161.4	51.3	−110.1	553.8
1988	144.7	593.8	738.6	−145.8	49.7	−96.1	642.4
1989 [1]	206.3	599.3	805.6	−149.9	45.0	−104.9	700.7

[1] Estimate.

Source: Department of Commerce, Bureau of Economic Analysis.

Trends in national saving

Because saving provides the funds necessary for investment, recent trends in national saving have concerned some observers. Table 2 presents saving by component as a percentage of gross national product (GNP). National saving since 1982 has comprised a smaller percentage of GNP than at any time in the preceding 2 decades. Both private and public saving as a percentage of GNP have fallen from their levels of the mid- to late-1970s. Some analysts suggest that because households save out of their disposable income (i.e., after-tax income), it is more appropriate to examine personal saving relative to disposable income than to examine personal saving relative to GNP. Table 3 presents personal saving as a percentage of disposable income. Generally, the same trends observed in Table 2 are evident in Table 3.

Table 2.—Gross Saving as a Percentage of Gross National Product, Selected Years, 1929–1989

Year	Gross private saving			Public saving		Total national savings
	Personal	Business	Total	Federal Government	State and local government	
1929	2.5	11.8	14.3	1.2	−0.2	15.3
1939	2.0	10.2	12.2	−2.4	0.0	9.7
1949	2.8	12.5	15.3	−1.0	−0.3	14.0
1954	4.4	11.4	15.8	−1.6	−0.3	13.9
1959	4.4	12.2	16.6	−0.2	−0.1	16.2
1964	4.8	12.2	17.1	−0.5	0.2	16.7
1969	4.4	11.1	15.4	0.9	0.2	16.5
1974	6.6	10.7	17.3	−0.8	0.5	16.8
1975	6.5	12.4	19.0	−4.3	0.3	14.9
1976	5.4	12.7	18.0	−3.0	0.9	15.9
1977	4.6	13.3	17.8	−2.3	1.4	16.9
1978	4.9	13.3	18.2	−1.3	1.3	18.2
1979	4.7	13.1	17.8	−0.6	1.1	18.3
1980	5.0	12.5	17.5	−2.2	1.0	16.3
1981	5.2	12.8	18.0	−2.1	1.1	17.1
1982	4.9	12.7	17.6	−4.6	1.1	14.6
1983	3.8	13.6	17.4	−5.2	1.4	13.6
1984	4.4	13.5	17.6	−4.5	1.7	15.1
1985	3.1	13.4	16.6	−4.9	1.6	13.3
1986	3.0	12.7	15.8	−4.9	1.5	12.4
1987	2.3	12.4	14.7	−3.6	1.1	12.2
1988	3.0	12.2	15.1	−3.0	1.0	13.2
1989 [1]	3.9	11.5	15.4	−2.9	0.9	13.4

[1] Estimate.

Source: Department of Commerce, Bureau of Economic Analysis.

Table 3.—Personal Saving as a Percentage of Disposable Personal Income, Selected Years, 1929–1989

Year	Personal saving as a percentage of disposable personal income
1929	3.2
1939	2.6
1944	25.1
1949	3.9
1954	6.3
1959	6.3
1964	7.0
1969	6.4
1974	9.3
1975	9.2
1976	7.6
1977	6.6
1978	7.1
1979	6.8
1980	7.1
1981	7.5
1982	6.8
1983	5.4
1984	6.1
1985	4.4
1986	4.1
1987	3.2
1988	4.2
1989 [1]	5.5

[1] Estimate.

Source: Department of Commerce, Bureau of Economic Analysis.

Is the U.S. savings rate too low?

In general

Advocates of a higher national saving rate note that the United States' national saving rate is low when compared to that of other nations. This comparison is shown in Table 4 for total national saving and in Table 5 for household or personal saving. Generally, saving rates of all nations have declined from the rates of the late 1960s. In percentage terms, the decline in the national saving rate of the United States between 1966 and 1985 is greater than the decline of the saving rates of Japan and Germany, but less than the decline of the saving rates of France and Italy. Table 5 shows that between 1972 and 1988 household saving rates generally have declined.

Table 4.—Gross Saving As Percentage of GDP Selected Countries, Selected Years, 1966–1985

Country	1966	1969	1972	1975	1978	1981	1982	1983	1984	1985
United States	20.2	20.0	19.4	18.1	21.0	19.8	16.8	15.8	17.4	16.5
Japan	32.1	36.7	38.3	32.3	32.3	31.1	30.5	29.8	30.6	31.4
Germany	26.8	27.6	26.4	20.9	22.6	20.2	20.3	21.1	21.5	22.2
France	25.8	25.0	26.0	23.0	22.6	19.7	18.6	18.1	18.5	18.0
United Kingdom	19.6	21.6	19.5	15.5	19.5	17.3	17.6	17.5	18.5	19.2
Italy	22.8	24.4	22.0	20.1	22.4	19.0	18.4	17.9	18.1	17.7
Canada	23.9	23.0	21.3	21.1	20.1	22.4	19.0	19.2	19.4	18.6
Belgium	23.6	24.4	25.5	21.8	20.5	13.4	14.1	15.0	15.5	15.9
Greece	20.3	21.9	28.3	23.3	26.3	24.7	17.7	16.3	16.6	12.2
Netherlands	26.3	26.9	26.9	23.1	21.0	20.5	21.1	21.5	23.4	24.1
Sweden	25.2	23.8	23.4	23.8	17.6	15.7	14.2	16.4	18.0	17.8
Switzerland	30.2	31.1	32.6	27.8	27.0	28.4	28.1	27.9	28.9	30.0
Australia	25.1	26.4	27.4	24.6	21.8	22.6	20.2	18.4	21.5	20.1

Source: Organization for Economic Co-Operation and Development, *OECD Economic Outlook*, 40, December 1986.

Table 5.—Net Household Saving As A Percentage of Disposable Household Income, Selected Years, 1972–1988

Country	1972	1975	1978	1981	1982	1983	1984	1985	1986	1987	1988
United States	7.5	9.4	7.3	7.7	7.0	5.5	6.3	4.5	4.2	3.3	4.4
Japan	18.2	22.8	20.8	18.3	16.5	16.3	16.0	16.0	16.4	15.1	15.2
Germany	14.4	15.1	12.0	13.5	12.7	10.8	11.4	11.4	12.2	12.3	12.6
France [1]	18.9	20.2	20.4	18.0	17.3	15.9	14.5	14.0	13.2	11.5	12.3
Italy [1]	31.2	30.3	29.3	26.7	25.9	26.1	25.5	24.7	23.7	22.2	22.8
United Kingdom [1]	9.6	12.1	11.5	12.9	11.9	10.4	10.6	9.8	7.5	5.6	4.1
Canada	8.7	12.7	12.6	15.4	18.2	14.8	15.0	13.8	11.3	9.7	8.7
Belgium	17.4	17.1	16.6	16.3	13.9	15.2	13.8	11.6	12.8	11.8	12.4
Greece	20.3	19.0	20.4	21.6	19.7	18.8	20.6	21.4	18.0	17.5	19.7
Netherlands	7.6	3.9	2.5	2.3	4.7	2.0	1.9	2.0	3.5	2.2	2.0
Sweden	2.3	4.7	4.5	3.8	0.5	1.2	0.9	1.1	−1.0	−3.6	−3.6
Switzerland	10.0	7.6	4.6	4.6	6.2	5.8	5.8	5.7	7.0	8.4	9.0
Australia	11.8	14.2	11.0	9.1	7.7	7.6	8.4	6.9	6.6	7.8	8.9

[1] The figures for France, Italy, and the United Kingdom are gross saving rates. All other figures are rates of gross household saving less household borrowing.

Source: Organization for Economic Co-Operation and Development, *OECD Economic Outlook*, 45, June 1989.

Advocates of a higher national saving rate argue that higher saving will increase growth and international competitiveness. They contend that without greater saving the United States will be unable to maintain one of the world's highest standards of living. Others argue that the United States has long been a relatively low-saving nation, and yet has enjoyed substantial economic growth. They note that many of the nations with higher saving rates were nations which needed to rebuild after the destruction of war on their own territory. They also contend that as nations' standards of living rise, it is natural to expect them to become more consumption oriented and reap some of the fruits of their past investment.

Personal saving

Some advocates of a higher national saving rate are concerned about personal or household saving rates in the United States as compared to those of other countries. Aside from the effect personal saving has on investment, they are concerned that Americans are not properly preparing themselves for their retirement years. Given increased lifespans, low personal saving today could result in higher public sector spending in the future to support retirees. Others counter that the low household saving rate would not be as worrisome from an investment perspective were it not for the large governmental budget deficits which have nearly entirely consumed personal saving for the past 6 years. They also point to studies which argue that current low personal saving rates may be a result of demographic factors and that as the "baby boomers" age, personal saving will rebound.[9] They note that international comparisons may be misleading since the American baby boom was more pronounced than that of other countries.

B. Issues in Public Policy Towards National Saving

In general

Some observers have advocated that the Federal Government initiate policies to increase national saving. Advocates can be found for policies to increase personal saving, policies to increase business saving, and policies to increase public saving. Those who advocate policies to increase private rather than public saving argue that savings will be put to their most efficient use if left in the hands of the private market rather than being directed by the government. Advocates of increasing public saving contend that incentives for private saving are inefficient to the extent that they reduce Federal revenues or require Federal expenditures which at least partially offset increases in private saving. They argue that much of the blame for reduced national saving in the 1980s can be attributed to Federal Government deficits. They argue that the most direct way to increase national saving is to reduce the Federal budget deficit. Others counter that such a view ignores the fact that if the Federal Government raises revenues or reduces expenditures, household disposable income and business profits are likely to decline which will have the effect of reducing private saving.

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[9] See, Alan Auerbach and Laurence Kotlikoff, "Demographics, Fiscal Policy, and U.S. Saving in the 1980s," National Bureau of Economic Research Working Paper No. 3150, October, 1989.

Some economists have argued that public policy is unlikely to affect national saving regardless of whether it is directed towards private saving or public saving.[10] In this view, individuals would discern that a reduction in the Federal deficit would reduce the need for tax revenue in the future to service the remaining debt. Consequently, they would reduce saving because less income would be required in the future to pay the taxes necessary to service the debt. Other economists counter that the experience of the 1980s, when public and private saving both declined, would appear to refute this view.

Tax policy and national saving

The bills and proposals described in Part III (above) each provide tax preferences in an attempt to increase personal saving. The proposals all increase the expected after-tax return on savings, thereby making saving relatively more attractive than current consumption. As a result of such incentives, taxpayers may choose to save more. However, if taxpayers save with certain goals or target amounts in mind, increasing the net return to saving means the goal could be met with a smaller investment of principal. For example, a taxpayer in the 28-percent marginal bracket may set aside $1,300 today to help defray tuition expenses of his child 15 years from now. If the taxpayer's investment earns 8 percent annually and those earnings are taxed annually at a 28-percent tax rate, 15 years from now his or her investment will be worth $3,000. If the taxpayer could defer the tax owed on the earnings for 15 years, an investment of only $1,025 today would be worth $3,000 15 years from now (assuming the same 8 percent return and 28-percent tax rate).

Substantial disagreement exists among economists as to whether taxpayers will respond to increases in net return on savings by increasing or reducing their saving. Some studies have argued that theoretically one should expect substantial increases in saving from increases in the net return.[11] Other studies have argued that, theoretically, large behavioral responses to changes in the after-tax rate of return need not occur.[12] Empirical investigation of the responsiveness of personal saving to after-tax returns provides no conclusive results. Some find personal saving responds strongly to increase in the net return,[13] while others find little or a negative response.[14]

If taxpayers respond to increases in their net return by increasing saving, the Tax Reform Act of 1986 (the 1986 Act), by lowering marginal tax rates for many taxpayers, may be expected to increase saving. For example, if prior to 1987, a 50-percent marginal

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[10] See Robert J. Barro, "Are Government Bonds Net Wealth?" *Journal of Political Economy*, Vol. 82, November/December, 1974, pp. 1075–1117.

[11] See, Lawrence H. Summers, "Capital Taxation and Accumulation in a Life Cycle Growth Model," *American Economic Review*, 71, (September 1981).

[12] See, David A. Starrett, "Effects of Taxes on Saving," in Henry J. Aaron, Harvey Galper, and Joseph A. Pechman (eds.), *Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax*, (Washington: Brookings Institution), 1988.

[13] See M. Boskin, "Taxation, Saving, and the Rate of Interest," *Journal of Political Economy*, April 1978, 86.

[14] See G. von Furstenberg, "Saving," in H. Aaron and J. Pechman (eds.), *How Taxes Affect Economic Behavior*, Brookings Institution, 1981.

tax bracket taxpayer could earn a 10 percent return, his or her net after-tax return would be 5 percent. If the same taxpayer were in the 28-percent marginal tax bracket after 1986, his or her net after-tax return would be 7.2 percent. The 1986 Act may also have encouraged saving by limiting interest deductibility. On the other hand, by limiting the availability of deductible IRAs and increasing the rate of tax on income from realized capital gains, the 1986 Act may have discouraged saving.

Effectiveness of tax-favored saving arrangements

Tax-favored saving arrangements such as IRAs or FSAs do not necessarily promote new saving. The higher net return and the increased awareness of the need to save for retirement, college expenses, or other goals which could arise from the private market advertising for savings accounts could induce taxpayers to save more.[15] On the other hand, some taxpayers might merely transfer existing savings accounts into a tax-favored account.

Some observers believe that IRAs have been responsible for new saving, i.e., saving which would not otherwise have occurred.[16] Analysts have compared the saving rate of Canada, which has savings incentives similar to the IRA, to that of the United States and have argued that an IRA is effective in increasing national saving.[17] Some analysts have criticized the methodology of studies which claim IRAs create new saving and argue that the reported results of the effect of IRAs on saving are implausibly large.[18] Others argue that IRAs have for the most part been financed by taxpayers either shifting funds from their existing holdings of securities into IRAs, or by placing in IRAs funds which they would have saved in any event.[19] In addition, it would be possible to finance the account with borrowed funds, in which case no net saving would occur. If a home equity loan were used, the interest on the borrowed funds would be deductible as well. Such an outcome may create pure arbitrage profits for the taxpayer. The interest expense is deductible against current income, while the interest income is sheltered from tax.

Certain of the proposals described in Part III would limit the ability of higher-income taxpayers to utilize fully all of the saving incentives provided by the proposals. Experience with IRAs prior to the 1986 Act indicated that although many lower-income individuals contributed to IRAs, higher-income taxpayers made up the greatest percentage of participants. Taxpayers with AGI of $50,000 or more were more than twice as likely to contribute to an IRA than were taxpayers with AGI below $50,000. Higher-income taxpayers made larger contributions as well. Taxpayers with adjusted

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[15] See, for example, Feenberg, Daniel, and Jonathan Skinner, "Sources of IRA Saving," in Lawrence Summers (ed), *Tax Policy and the Economy*, vol. 3, (Cambridge: Massachusetts Institute of Technology Press), 1989.

[16] See, Venti, Steven F. and David A. Wise, "The Evidence on IRAs," *Tax Notes*, vol. 38, January 25, 1988, pp. 411-16.

[17] See, Carroll, Chris, and Lawrence H. Summers, "Why Have Private Saving Rates in the U.S and Canada Diverged?" *Journal of Monetary Economics*, 20, September 1987.

[18] See Gravelle, Jane G., "Capital Gains Taxes, IRA's, and Savings," CRS Report for Congress 89-543, September 26, 1989.

[19] See, Galper, Harvey and Charles Bryce, "Individual Retirement Accounts: Facts and Issues," *Tax Notes*, vol. 31, June 2, 1986, pp. 917-21.

gross incomes of $50,000 or more constituted approximately 29 percent of all IRA contributors in 1985, but accounted for more than 35 percent of IRA contributions. In 1987, taxpayers with adjusted gross incomes of $50,000 or more constituted approximately 15 percent of all IRA contributors, but accounted for more than 19 percent of IRA contributions. (See Tables 6 and 7.)

Table 6.—IRA Participation By Income Class, 1985

Adjusted gross income class	Returns reporting IRA Contributions		
	Number in millions	Percent of eligible returns [1]	Contributions (billions of dollars)
All classes	16.2	17.8	38.2
Under $10,000	.6	2.3	1.1
$10,000 to $30,000	5.1	13.6	9.7
$30,000 to $50,000	5.7	32.9	13.5
$50,000 to $75,000	3.0	56.5	8.7
$75,000 to $100,000	.9	74.1	2.7
Over $100,000	.8	76.1	2.6

[1] Eligible taxpayers include self-employed persons as well as wage and salary employees. However, taxpayers whose income consists solely of interest income, for example, were ineligible to contribute to IRAs.

Source: Internal Revenue Service, *1985 Statistics of Income.*

Table 7.—IRA Participation By Income Class, 1987

Adjusted gross income class	Returns reporting IRA Contributions		
	Number in millions	Percent of returns [1]	Contributions (billions of dollars)
All classes	9.8	9.2	14.1
Under $10,000	.5	1.4	.7
$10,000 to $30,000	3.7	9.0	5.4
$30,000 to $50,000	4.1	20.9	5.3
$50,000 to $75,000	.8	10.0	1.4
$75,000 to $100,000	.3	14.9	.6
Over $100,000	.4	19.0	.7

Source: Internal Revenue Service, *1987 Statistics of Income.*

With marginal tax rates reduced for many taxpayers as a result of the 1986 Act, the effectiveness of a tax preference for saving could be lower today than prior to 1987. For example, if prior to 1987, a taxpayer in the 50-percent marginal tax bracket received a 10-percent return on his or her investment, excluding such income from tax would increase his or her net return to 10 percent from an after-tax return of 5 percent. After the 1986 Act, such a taxpayer would be in the 28-percent marginal tax bracket and the exemption would increase his or her net return to 10 percent from an after-tax return of 7.2 percent. Thus, the exemption provided a greater increase in net return prior to 1987.

C. Issues in the Design of Tax-Based Savings Incentives

Deferral vs. exemption

The proposals described above for tax-based savings incentives would either defer taxes on contributions (and earnings thereon) to a preferred saving account or provide an exclusion from income for such amounts.

Exempting income from taxation is always more valuable to the taxpayer than deferring taxation on the same income. For example, if $1,000 could be invested for a period of 10 years to earn 8 percent annually and those earnings were taxed annually to a taxpayer at a 28-percent marginal tax rate, the accumulated interest, net of taxes, would be $750.71 after 10 years. If the earnings were not taxed annually, but rather the tax was deferred for 10 years and assessed on the accumulated interest at the end of the 10-year period at a 28-percent marginal tax rate, the value of the taxpayer's net earnings would be $834.43. If those earnings were exempt from taxation, this investment would have accumulated $1,158.93 in interest by the end of the 10-year period. In this example, deferral increases the taxpayer's return by 11.2 percent over the 10-year period compared to annual taxation. Exemption is 38.9 percent more beneficial than deferral over the same period. The longer the period of deferral, the greater the benefit of deferral becomes, and the longer the period of deferral, the closer the benefit of deferral gets to the benefit of exemption.

The benefit of tax exemption generally is greater to a higher-income taxpayer than a lower-income taxpayer, because the tax liability saved per dollar of tax-exempt income is greater for taxpayers in higher tax brackets. The benefit of deferral depends not only on the taxpayer's current tax rate, but also on his or her future tax rate. The benefit of deferral is increased for a taxpayer who currently is in a high marginal tax bracket, but who can defer the tax liability until a lower marginal rate applies. The benefit of deferral is decreased if the taxpayer currently is in a low marginal tax bracket and defers the tax liability to a year when a higher marginal tax rate applies. In this circumstance, because of the taxpayer's low initial tax rate, the taxes deferred may actually be worth less (in present value terms) than the taxes owed at the later date when the taxpayer is in a higher tax bracket.

Economics of initial deductibility and deferral of income compared to exclusion from income

Under present law, IRAs provide tax deferral. In the case of deductible IRAs, no tax is assessed on either the amount contributed to an IRA or the earnings on such amount until the taxpayer sub-

sequently withdraws the funds from the IRA.[20] The Administration's FSAs and the Packwood-Roth IRA-Plus are examples of exclusion of income from tax. Any income earned under these proposals would be exempt from tax upon withdrawal.

Some analysts have suggested that these seemingly different approaches in the design of tax-preferred savings accounts are functionally equivalent, both to the taxpayer and to the Federal Government. The funds available to a taxpayer after a period of years under the 2 approaches depends, if the invested funds otherwise earn the same rate of return, on the taxpayer's current and future tax rates. The value of the stream to the Federal Government depends upon the Federal Government's discount rate.[21]

Example

Assume the taxpayer has $1,000 of income which he contemplates saving. Assume the taxpayer can earn an annual return of 10 percent on the investment. Denote the marginal income tax rate the taxpayer faces today by t_0 and the marginal income tax rate the taxpayer will face 10 years from now by t_{10}.

Suppose the taxpayer contributes the $1,000 to a tax-favored savings account which qualifies for a tax deduction for the current contribution and which taxes subsequent withdrawals (much like a present-law, tax-deductible IRA). At the end of 10 years, the taxpayer withdraws the principal and accumulated earnings and includes the withdrawal in income. The after-tax value of the withdrawal will be $\$2{,}593.74\ (1-t_{10})$.[22]

Alternatively, assume that the contribution to the tax-favored account is not deductible against current year taxes, but that any income earned is exempt from tax (much like the Administration's FSA proposal). In this case, the taxpayer must pay tax on the $1,000 of income, leaving $\$1{,}000\ (1-t_0)$ to deposit in the tax-favored account. Assume that this amount will earn 10 percent per year. At the end of 10 years, the taxpayer withdraws the funds. Upon withdrawal, the taxpayer has $\$2{,}593.74\ (1-t_0)$.

The table below summarizes the example for both types of accounts in terms of funds available after 10 years to the taxpayer and the pattern of tax receipts to the Federal Government.

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[20] A nondeductible IRA allows a taxpayer to defer tax on earnings on nondeductible contributions until the taxpayer withdraws the funds from the IRA.

[21] Analysts disagree about what discount rate the Federal Government should apply when computing the present value of funds receivable in different years.

[22] $2,593.74 is the future value of $1,000 compounded annually at 10 percent.

Table 8.—Funds Available to Taxpayer and Pattern of Tax Receipts Under Deductible IRA and FSA

Funds Available to Taxpayer After 10 Years

Deductible IRA	$\$2,593.74(1-t_{10})$
FSA	$\$2,593.74(1-t_0)$

Pattern of Income Tax Payments Under Deductible IRA and FSA

	Tax payments in		
	Current year	Years 1–9	Year 10
Deductible IRA	0	0	$\$2,593.74t_{10}$
FSA	$\$1,000t_0$	0	0

As the table indicates, the funds available to the taxpayer after 10 years under the 2 options depends upon the taxpayer's current and future tax rates. The present value of the stream of tax payments to the Federal Government depends upon the Federal Government's discount rate.

Present and future tax rates equal

When the taxpayer's tax rate today is equal to the taxpayer's tax rate in the future ($t_0 = t_{10}$), there is no difference in the amount of the funds available after withdrawal. Some have argued that in this case the present value of the tax revenues collected is identical and that only the timing of the tax collection is different. This is true if the Federal Government's discount rate is equal to the rate which the taxpayer can earn on an investment (10 percent in this example). The present value of $2,593.74 receivable in 10 years discounted at 10 percent is $1,000. However, if the Federal Government's discount rate is less than the rate which the taxpayer can earn on an investment (say, 8 percent), then the present value of the tax receipts receivable under the deductible IRA exceeds that of the receipts receivable under the FSA. On the other hand, if the Federal Government's discount rate is greater than the rate which the taxpayer can earn on an investment (say, 12 percent), then the present value of the tax receipts receivable under the FSA exceeds that of the receipts receivable under the deductible IRA.

Present tax rate greater than future tax rate

When the taxpayer's tax rate today is greater than the taxpayer's tax rate in the future ($t_0 > t_{10}$), the taxpayer will have more

funds available after withdrawal with the deductible IRA than with the FSA, all else equal. If the taxpayer's current tax rate exceeds his or her future tax rate, more revenue is lost per dollar of up-front deduction than is recouped with the tax per dollar of withdrawal. Discounting at 10 percent, the present value of the taxes foregone are greater under the deductible IRA than under the FSA. However, if the Federal Government's discount rate is less than the rate which the taxpayer can earn on an investment, the opposite may be the case.

Future tax rate greater than present tax rate

If the taxpayer's tax rate today is less than the taxpayer's tax rate in the future ($t_0 < t_{10}$), the taxpayer will have more funds available upon withdrawal under an FSA, than with a deductible IRA, all else equal. If the taxpayer's current tax rate is less than his or her future tax rate, less revenue is lost per dollar of deduction than is recouped with the tax per dollar of withdrawal. Discounting at 10 percent, the present value of the taxes foregone are greater under the FSA than under the deductible IRA. However, if the Federal Government's discount rate is greater than the rate which the taxpayer can earn on an investment, the opposite may be the case.

Taxpayer perceptions

A taxpayer who believes that his or her tax rate in the future will be less than the current tax rate should find the deductible IRA more attractive. Many taxpayers do not have a higher marginal tax rate upon retirement. This is often because social security comprises a portion of many taxpayers' retirement income, and only a portion of social security is subject to tax. On the other hand, such an analysis is based upon the constancy of the structure of tax rates over the taxpayer's life. If taxpayers believe that tax rates will be higher in the future, they might well find the FSA more attractive. If taxpayers believe that tax rates will be lower in the future, they might well find the IRA more attractive.

Some taxpayers may prefer the deductible IRA because of the difficulty in predicting future tax rates and liability. Some taxpayers may prefer to reduce current tax liability and increase current cash flow. Some taxpayers may prefer the FSA because it provides the certainty that their earnings are exempt from tax.

Whether the stream of tax receipts to the Federal Government is equivalent under either type of tax-favored saving account depends upon whether the tax rate the taxpayer will face upon withdrawal is the same as the tax rate he or she faces at the time of contribution, and on whether the appropriate discount rate for the Federal Government is greater than, equal to, or less than the rate of return which taxpayers can earn on their investments.

Taxpayers who save more than IRA contribution limit

The preceding discussion implicitly has assumed that the amount the taxpayer intends to save is less than the applicable account contribution limit. For example, if the taxpayer has only $1,000 of taxable income available for saving, under the FSA he or she must pay tax out of that $1,000 before contributing to the FSA. Conse-

quently, he or she makes a net FSA contribution of less than $1,000. With a deductible IRA, he or she can contribute the full $1,000.

If a taxpayer plans to save annually more than the contribution limit, the FSA effectively increases the amount of saving which can benefit from the tax preferences accorded an FSA or IRA.[23] To illustrate, assume a taxpayer has $3,000 of taxable income which can be saved. Assume that both the IRA and the FSA have a contribution limit of $2,000. In addition, assume the taxpayer's marginal tax rate is 28 percent and that his or her tax rate will be 28 percent 10 years from now. Assume investments earn 10 percent annual interest.

Under an IRA with a $2,000 contribution limit, the taxpayer could contribute $2,000 to the IRA and deduct the $2,000 from taxable income leaving only $1,000 of the $3,000 in earnings subject to current year tax. This would create a $280 tax liability. After paying tax, the taxpayer would have $720 which he or she could invest in nontax-favored investments. However, earnings on such investments would be taxable annually. After 10 years, the $2,000 contributed to the IRA would be worth $5,187.49 before tax, and $3,734.99 after tax upon withdrawal. The $720 invested in nontax-favored investments would be worth $1,443.05 after tax.[24] This is a total of $5,178.04 from the 2 investments.

Under an FSA with a $2,000 contribution limit, the taxpayer could contribute $2,000 to the FSA. However, because such contributions are not deductible against current income, the taxpayer's $3,000 of earnings incur an $840 income tax liability (28 percent of $3,000). After paying tax and contributing $2,000 to the FSA, the taxpayer would have $160 which he or she could invest in nontax-favored investments. Earnings on such investments would be taxable annually. After 10 years, the taxpayer would have $5,187.49 available for tax-free withdrawal from the FSA, and $320.68 available after-tax from the $160 invested in nontax-favored investments. This is a total of $5,508.17 from the 2 investments, which is 6 percent greater than under a deductible IRA which has the same contribution limit.

The earlier example comparing an IRA to an FSA assumed that the taxpayer would have to pay tax on the FSA contribution out of money available to contribute, leaving less money to contribute. However, this example demonstrates that the taxpayer would be wiser to make the full contribution to the FSA and pay the tax liability out of other funds set aside for saving. To be equivalent to a $2,000 FSA, an IRA would have to have a deductible contribution limit of $2,777.78. Because different taxpayers have different marginal tax rates, equivalence between these tax-favored saving alternatives would require different contribution limits for different taxpayers.[25]

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[23] More generally, this analysis applies to any taxpayer who is willing to pay the tax liability due on income contributed to an FSA out of other income, rather than the FSA contribution.

[24] It is assumed that the monies invested in nontax-favored investments also earn 10 percent interest annually, but after tax have a net return of 7.2 percent annually. $1,443.05 is the value of $720.00 compounded annually at 7.2 percent for 10 years.

[25] More generally, for a taxpayer facing a marginal tax rate of t, the equivalent contribution limit for a deductible IRA is C/(1-t) where C is the contribution limit for a tax-favored account which exempts future income.

The potential for tax arbitrage and the design of savings incentives

In general

Savings incentives providing either deferral or exemption of income from tax have the effect of raising the net return to taxpayers by reducing their tax liability. Some analysts have observed that increasing the return on some, but not all, assets, creates profitable opportunities for arbitrage.[26] To the extent taxpayers engage in tax arbitrage by utilizing the saving incentive, personal saving does not increase, the Federal Government loses revenue, and, in combination, national saving declines. Tax arbitrage, therefore can offset potential gains in national saving which might otherwise result from the proposed saving incentive. Tax arbitrage can occur if a taxpayer can borrow to make a tax-favored investment or can shift funds from existing or planned saving into the tax-favored vehicle. Saving incentives can be designed to reduce this possibility.

Borrowing

When interest on borrowed funds is deductible, it may be profitable for a taxpayer to borrow to contribute to a tax-favored savings account, even if the interest rate on the loan incurred exceeds the rate of return on investments in the account. For example, if investments in the tax-favored account earn 10 percent per year and the taxpayer's marginal tax rate is 28 percent, it would be to the taxpayer's advantage to borrow to fund the account even if the annual interest rate on the loan is as high as 13.8 percent. Critics of tax-favored savings accounts note that when such arbitrage occurs not only is there no new saving undertaken by the taxpayer, as borrowing offsets saving, but the loss of the revenue to the Federal Government causes national saving to decline.

Critics of tax-favored accounts note that this type of tax arbitrage could be limited by providing symmetrical treatment of saving and borrowing. They observe that either an increase in saving or a decrease in borrowing will increase the personal saving rate. Accordingly, it is inefficient and creates arbitrage opportunities to limit tax benefits to contributions to specified accounts such as an IRA or FSA while permitting taxpayers to deduct interest expense against other income.

Proponents of tax-favored savings accounts note that the spreads in interest rates for borrowing as opposed to lending which result from financial intermediation reduce the potential profitability, and thereby the likelihood, of such tax arbitrage. Proponents also observe that the opportunities for tax arbitrage would be further reduced by prohibiting borrowed funds to be used to make deposits to tax-favored accounts, or similar measures targeted at abusive transactions. Proponents of tax-favored savings accounts argue that limiting tax preferences to contributions to designated accounts simplifies the incentive both for the taxpayer and for IRS administration. Symmetric treatment of saving and borrowing would add substantial complexity for taxpayers. For example, taxpayers who

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[26] Galper, Harvey and Eugene Steuerle, "Tax Incentives for Saving," *The Brookings Review*, Winter 1983.

do not itemize their deductions currently do not need to retain records of their indebtedness for tax purposes.

Shifting of existing savings

Some analysts argue that the creation of tax-favored saving accounts creates an opportunity for a second type of tax arbitrage. They observe that it can be advantageous for taxpayers to transfer funds from existing savings into the tax-favored accounts. Such behavior would not increase private saving and would reduce national saving by the amount of tax revenue foregone to the Federal Government.

Proponents of tax-favored saving accounts counter that to the extent that the tax-favored accounts impose a holding period requirement such account shifting is limited. In addition, shifting which does occur may commit existing funds to saving for a longer period of time and thereby constitute new saving. Proponents also observe that for many taxpayers the ability to shift funds is limited by the small amount of financial assets which most households hold, and that any such shifting possibilities would be quickly exhausted for many taxpayers.

Shifting of planned savings

Tax-favored saving accounts also may create opportunities for a third type of tax arbitrage. Currently, taxpayers save billions of dollars per year (see Table 1). Some taxpayers may contribute to a tax-favored account funds which they would have saved in any event. Doing so increases the taxpayer's return on saving, but does not necessarily increase the taxpayer's aggregate saving. Moreover, when the revenue loss to the Federal Government is taken into account, aggregate saving could decline. Proponents of tax preferences for saving observe that increasing the net return to saving, even for those taxpayers who already save, may induce increases in planned saving.

Many analysts have argued that the potential for tax arbitrage can be reduced and the efficiency of saving incentives increased if the tax benefits provided are only available at the margin. By this the analysts mean that tax benefits should not be provided for saving which would have occurred in the absence of the tax benefit. For example, if a taxpayer saved $1,000 annually before enactment of a saving incentive and subsequently saved $1,000, the post-enactment saving of $1,000 should not receive a tax benefit. Tax benefits only should be granted to saving in excess of $1,000. If, subsequent, to enactment, the taxpayer saved $1,100, the increase of $100 would represent the "marginal" increase in saving. These analysts observe that present-law IRAs and the proposed FSAs have limited ability to reward marginal increases in saving because each imposes an annual contribution limit.

Proponents of present-law IRAs and FSAs counter that many families annually save substantially less than either the $2,000 IRA contribution limit of present law or the $5,000 contribution limit of the proposed FSA. Consequently, the proposed tax benefits reward increases in saving at the margin for these taxpayers. Proponents further contend that it is difficult to design and administer a proposal which would reward only those increases in saving

which were at the margin. Identifying marginal increases in saving requires a measure of that saving which theoretically would have occurred without the tax preference. Such a measure is not available. Conceivably, a tax incentive could be designed which rewarded increases in a taxpayer's net worth, as increases in net worth reflect increased saving or reduced borrowing. However, such a calculation would require substantial information to be supplied by the taxpayer, such as the total value of all assets and indebtedness. Taxpayers currently are not required to provide such information. This requirement could impose great demands for recordkeeping on individual taxpayers and prove difficult for the IRS to administer and enforce.

Taxpayers' saving goals and the design of saving incentives

Taxpayers save for a variety of reasons. Some save to provide retirement income for themselves or to leave a bequest to their spouse or children. Others save to finance their children's education, to make the down payment on a home, or take a vacation. Some saving provides a precautionary reserve of funds for use in emergencies. The different goals which motivate saving can be expected to affect the choice among saving instruments. For example, saving to provide precautionary reserves implies that the funds may be needed immediately and consequently liquid assets such as a savings account at a bank or a money market fund would provide the appropriate savings instrument. Retirement savings may not be needed for 20 years or more so that the taxpayer might find the greater returns associated with less liquid assets more attractive.

This discussion suggests that tax preferences for saving for particular goals may be made more efficient if they do not bias taxpayers in their selection of saving instruments. For example, a tax preference for retirement saving which required taxpayers to use only bank saving accounts might inefficiently induce taxpayers into holding too much of their saving in liquid assets and reduce funds available for less liquid investments. On the other hand, restriction of saving to particular instruments may promote other goals. For example, to the extent deposit insurance protects bank saving accounts, the surety of the retirement income would be guaranteed.

If one goal of tax incentives for saving is to promote saving towards a particular goal (e.g., retirement income, education, or home purchase), it might be difficult to restrict utilization of the tax preference solely to those taxpayers who intend to meet that goal. For example, the deductible IRA can provide substantial benefit to a taxpayer whose saving goal is something other than creating retirement income. This is because of the benefit of tax deferral which the IRA provides. For a taxpayer with a 28-percent marginal tax rate, $1,000 of income would leave $720 available after tax to be saved. If this amount is invested to earn 8 percent annually and the earnings are taxed annually at a 28-percent marginal tax rate, at the end of 10 years the taxpayer will have $1,260.51. If, however, the taxpayer can deduct the $1,000 and accumulate 8 percent annual interest tax-free, at the end of 10 years he or she will have $2,158.92. After including the distribution in income, subject to the additional 10-percent tax on early withdrawals, the taxpayer would

net $1,338.53 (slightly over 6 percent more than if the account had not been used). Some would argue that a goal of any saving incentive should be to increase the national saving rate. They would not find use of an IRA for nonretirement purposes troubling, because saving for non-retirement purposes also contributes to the national saving rate. On the other hand, to the extent that such saving is merely transferred from a nontax-favored instrument to the IRA, no gain in national saving has occurred.

Opponents of tax preferences for saving for education, housing, or retirement have argued that many taxpayers currently save towards these goals. They argue that a tax preference in such circumstances is not rewarding behavior which taxpayers would not have otherwise undertaken. This reduces the efficiency of the tax preference in generating new saving. Proponents of such tax preferences note that currently many taxpayers are saving insufficient amounts for education or home purchase and that, as a consequence, such potential inefficiencies are likely to be small.

Some proponents of tax preferences for retirement savings have observed that when many taxpayers reach retirement age their only assets are their home, their car, and their pension. They own few financial assets. Proponents of IRAs argue that an investment vehicle, like an IRA, which induces taxpayers to hold more financial assets upon retirement increases national saving. On the other hand, this same observation would suggest that liberalizing the rules for IRAs to permit penalty-free nonretirement uses of IRA funds (e.g., home purchase) might not increase national saving. Liberalizing withdrawals increases the likelihood that the taxpayer holds few financial assets upon retirement. In addition, the observation that many taxpayers own their home upon retirement suggests that those taxpayers save to buy homes and providing a tax preference for an activity they already undertake can have a large efficiency cost. Proponents of liberalized withdrawals note that the data on current retirees may not be relevant because the real (inflation adjusted) price of housing is greater today for first-time home buyers than it has been in the past.

Provisions of present law providing saving incentives

Present law contains various tax incentives for savings. Given the existence of these tax-favored savings vehicles, some argue that additional savings incentives are not justified. For example, the interest on qualified bonds issued by State and local governments is exempt from Federal income taxation. The interest on U.S. Series EE savings bonds currently is taxed on a deferred basis. In addition, if the taxpayer uses the interest from qualifying Series EE savings bonds to pay qualifying post-secondary education expenses, the interest is exempt from tax. Many taxpayers can contribute to tax-favored defined contribution or other qualified pension plans to save for retirement. Under certain circumstances, benefits accrued under a qualified pension plan may be borrowed or withdrawn to pay education expenses, purchase homes, or other nonretirement savings goals.

Interest earned on a life insurance contract accrues annually (inside buildup). The interest income which has accrued to the policy is subject to taxation on a tax-deferred basis. Consequently,

the policy could be redeemed to meet a saving goal. Alternatively, a loan against the cash surrender value of a life insurance contract can be used as a method of tax-favored saving, generally without current income taxation of the inside buildup. Present law offers deductible or nondeductible IRAs to all taxpayers. Finally, parents can shift assets to children and receive the benefit of the children's lower marginal tax rates if the children are over 14 years old.

Others argue that the existing tax incentives are insufficient to encourage systematic, long-term saving. They note that surveys indicate most families that save for their children's college education are saving at levels insufficient to finance college education for their children. They further observe that homeownership rates are falling and argue that it requires a greater saving rate today to accumulate the funds necessary to make a down payment than in prior years. They argue that the national saving rate is too low and further inducements to save are warranted.

Enactment of additional saving incentives would be expected to alter taxpayers' choices among various taxable and tax-preferred instruments. For example, some have suggested that the Administration's proposed FSA would reduce demand for qualifying tax-exempt State and local bonds, thereby increasing issuers' interest costs. This would occur because tax-exempt bonds trade with yields below those of taxable securities. The FSA would permit taxpayers to earn taxable yields on a tax-exempt basis. The purchase of otherwise taxable instruments to be held in an FSA would be preferable to the purchase of tax-exempt bonds. More generally, the FSA or an expanded IRA could be expected to increase the demand for otherwise taxable instruments at the expense of instruments which are tax-referred under current law. On the other hand, to the extent that existing tax-preferred instruments are held only by taxpayers who would be ineligible for the FSA (e.g., taxpayers whose adjusted gross income exceeds $120,000) the demand for existing tax-favored instruments would be unaffected. The annual contribution limitation of the FSA proposal also would limit the effect on the demand for other tax-preferred instruments. Moreover, to the extent that savings incentives generate increases in saving, the demand for all instruments would increase. If this were to occur, the issuers of instruments which are tax-preferred under current law conceivably could benefit as the cost of capital declined.

Equity considerations

Some believe it is inappropriate to permit any taxpayer an exemption, full or partial, for interest on savings. They argue that such provisions more often benefit higher-income taxpayers than lower-income taxpayers, and that it is inappropriate to extend tax incentives to save to higher-income taxpayers because they already possess the means to save without added inducement. They observe that higher-income taxpayers save a higher proportion of their income than do lower-income taxpayers. Others argue that the declining national savings rate justifies savings incentives which are broadly applicable.

To address equity concerns, the benefits of saving incentives for higher-income taxpayers could be restricted in a number of ways. The amount of the annual contribution could be limited. For exam-

ple, under present law the deductibility of IRA contributions is phased out for married taxpayers with AGI between $40,000 and $50,000. However, higher-income taxpayers may make nondeductible IRA contributions for which the benefit of tax deferral remains. The Administration's FSA proposal would phase out benefits for married taxpayers with adjusted gross income in excess of $120,000.

Credits for annual contributions, rather than deductions for contributions, could be utilized as a way to address perceived inequity of saving incentives. In general, a credit provides the same dollar reduction in tax to all taxpayers regardless of their tax rate. Depending upon size, a credit could be more or less generous than a deduction. However, deductions and nonrefundable credits provide no benefit to individuals who have no income tax liability.

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ERRATA FOR JCS-11-90

On page 8 (B. Administration Proposal), in the section under the heading, *"Contribution limits,"* make the following changes:

In the first sentence of the first paragraph, change the parenthetical to read: "(a married couple would be permitted to make $5,000 in annual contributions if both spouses together earn at least $5,000)."

Change the second sentence of the second paragraph to read: "Contributions would be permitted for single taxpayers with AGI of $60,000 or less, for heads of households or surviving spouses with AGI of $100,000 or less, and for married taxpayers filing joint returns with AGI of $120,000 or less."

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